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THIS PAPER DISCUSSES THE NAVY'S HOMEPORT PLAN AS IT AFFECTS THE PROVISION OF CERTAIN SPECIALTY HEALTH CARE IN THE CORPUS CHRISTI/INGLESIDE, TX AREA. BY 1990 THE TOTAL INPATIENT CATCHMENT AREA IS EXPECTED TO INCREASE BY ABOUT ONE-THIRD. IN 1987, NAVY HOSPITAL, CORPUS CHRISTI (NHCC) OPERATES 40 BEDS, JUST OVER HALF OF WHICH ARE DEDICATED TO ALCOHOL REHABILITATION. CAPABILITIES OF NHCC IN CERTAIN SPECIALTY AREAS AND ALTERNATIVES FOR PROVIDING THIS CARE ARE PRESENTED. OPTIONS DISCUSSED ARE AN ALL ACTIVE DUTY STAFF, INCREASED USE OF CHAMPUS, JOINT HEALTH BENEFITS DELIVERY PROGRAM AND CONTRACTING. (AW)

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AND ORTHOPEDICS) FOR NAVAL HOSPITAL, CORPUS CHRISTI, HEALTH  
CARE BENEFICIARIES IN 1990 WHEN HOMEPORT IS IN OPERATION

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Submitted to the Faculty of  
Baylor University  
In Partial Fulfillment of the  
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of  
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by  
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## CHAPTER I

### INTRODUCTION

The field of healthcare in general and military healthcare in particular is in constant metamorphosis. Military healthcare in the Corpus Christi area projects a gain of 12,069 beneficiaries between 1985 and 1990. This includes 2,798 growth in the beneficiary base and an additional 9,271 beneficiaries from the new Navy Gulf Coast Strategic Homeporting Plan when it is operational in 1990, a projected 50.4 per cent increase (Appendix B).

This graduate project looks at the Navy's homeport plan as it affects Corpus Christi/Ingleside, Texas, capabilities of the Naval Hospital in certain specialty care areas, and discusses alternatives for providing specialty health care for beneficiaries in the Corpus Christi area.

Conditions Which Prompted the Study. The United States Navy and the other armed forces have a responsibility of maintaining the highest level of operational readiness. The Navy, in meeting its mission must strategically position its ships and men across the United States and the world.

Since the Naval Recovery Program of 1980 the Navy established a goal of increasing the size of the fleet to 600 ships by the end of the 1980s (Navy Ships: Information on Benefits and Costs of Establishing New Homeports, June 1986 [henceforth referred to as "Navy ..., June 1986"] p. 2). This increase of some 130 ships

prompted the Navy to reconsider its present policy of having a limited number of homeports. It is planning to add homeports on both the United States Atlantic and Pacific coasts and on the Gulf of Mexico. This homeporting plan was initiated in 1982 with the following strategic rationale:

(1) dispersing ships to more ports will improve the U.S. defensive posture and the survivability of the fleet,

(2) co-locating ships of the same battlegroup will enhance warfighting coordination,

(3) homeporting ships near locations with existing industrial capability will permit the Navy to take advantage of this capability,

(4) homeporting ships in more diverse geographical locations will permit the Navy to train in a variety of environments and will reduce the response time to potential conflict areas, and

(5) developing additional logistics support complexes will help support the expanded fleet (Navy Ships ..., June 1986, p. 3).

The Gulf Coast Strategic Homeporting action consists of three parts (Draft Environmental Impact Statement United States Navy Gulf Coast Strategic Homeporting, August 1986 [referred to as "DEIS, Aug 1986"]):

(1) Homeport vessels composed of an aircraft carrier battle group in Pensacola, Florida; Mobile, Alabama; and Pascagoula, Mississippi. These three cities are proposed to be assigned 11 ships altogether, including an aircraft carrier, destroyers, cruisers, minesweepers, and frigates.

(2) Homeport vessels composed of a battleship surface action group at Corpus Christi/Ingleside and Galveston, Texas. A total of 10 ships would be assigned to these two cities, including the battleship group at Corpus Christi/Ingleside, and the Naval Reserve Forces (NRF) ships at Galveston.

(3) Homeport a total of six support vessels at Lake Charles, Louisiana; Gulfport, Mississippi; and Key West, Florida (page S-1).

The Corpus Christi/Ingleside communities are working very diligently through the South Texas Homeport Project office to ensure funding is approved by Congress to make this plan a reality. This office serves as a coordination point between the U.S. Navy, the various governmental agencies and other groups involved in the project. It is also available to the public as a Homeport information center.

The Navy requested proposals from the Gulf Coast communities to identify the strength of the community's desire to have a site used for a Naval installation, to establish the availability of land to support the proposal, and to consider various incentives offered by the communities including land and development cost offsets which could reduce overall development and operational costs to the federal government (DEIS, Aug 1986).

The State of Texas obligated 25 million dollars in state appropriations toward the construction of Homeport. It will also provide an additional 118 million dollars for parks and increased assistance for education and law enforcement within the area affected by Homeport growth.

In April, 1985 the voters of Nueces County, Texas passed a 25 million-dollar tax bond issue by a three to one margin. These funds will be used toward homeport site construction costs.

Corpus Christi/Ingleside has been accepted as the future homeport site for the battleship USS Wisconsin, the training aircraft carrier USS Lexington, a cruiser, a destroyer, and a

minesweeper. Provided that funding is approved, construction should begin in late 1987, peak during the 1988-1989 construction period, and decline as the construction phase comes to an end in 1990 when operations begin (DEIS, Aug 1986).

During the operations phase, Homeport will employ approximately 4800 military personnel and 400 civilian personnel, who will also be entitled to certain occupational health related medical services. A total gain of 12,069 from the 1985 base level in the Corpus Christi catchment area is anticipated. Further, it is expected that growth in the area due to the new Homeport will stimulate some 2699 off-base civilian jobs (Homeport Facts and Figures).

With the anticipated increase in active duty population and military health care beneficiaries, methods for providing the required health care must be investigated. The Homeport site in Ingleside is approximately 40 miles by land from the Naval Hospital. There are plans for a medical and dental clinic at the base in Ingleside.

Naval Hospital, Corpus Christi (NHCC) is currently the only military health care facility in the area. Its average inpatient census, as of December 1986 was approximately 30-35, over half of whom are in the Alcoholic Rehabilitation Program. Specialty services are limited by available staff, with two internal medicine specialists, one orthopedic surgeon, one pediatrician, one otolaryngologist, one radiologist, one psychiatrist, one



psychologist, one anesthesiologist, one anesthetist, one podiatrist, and one optometrist, and approximately twelve primary care providers.

Obstetrical services were discontinued in 1978, therefore requiring the pregnant women to either use CHAMPUS (for dependents and authorized family members) or the Navy (for active duty women) to pay for the care. A study in the early 1980s reaffirmed the decision not to have obstetrics at NHCC ("Reestablishment of OB/GYN ...", 1983, Dec 13). Limited gynecology services are available at NHCC from the primary care physicians. One general surgeon is on temporary active duty (TEMAC) from the Reserves to care for active duty members and emergencies from January until September, 1987. There has not been a permanently assigned general surgeon for Naval Hospital, Corpus Christi since September 1986. In July of 1987 the radiologist is expected to move to another duty station and not be replaced. Authorization to contract for radiology and general surgery services as well as other areas has been requested since February, 1987. A Joint Health Benefits Delivery Program (JHRDP) was started in February 1987 to provide dependents and retirees with surgical care through a program which involves cost-sharing of the surgeon's fee.

The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) is utilized by retirees and dependents for services not available at NHCC.

A mixture of ways of providing health care to the beneficiaries has taken shape already. Active duty health care providers, CHAMPUS, JHBDF, and contractor provided services are either in place or are being seriously considered. The United States Congress, the Office of the Assistant Secretary of Defense for Health Affairs (OASD(HA)), and the Department of the Navy are considering alternatives to CHAMPUS for providing necessary care, including beneficiary enrollment in alternate delivery systems (CHAMPUS Prime) and contract clinics which are part of the direct care system (NAVCARE Clinics). Consideration must be given to pros and cons of these methods for providing health care and what increased needs will be generated with the growth of the beneficiary population and the addition of Homeport in 1990.

Problem Statement. The problem was to determine the best methods of providing certain specialty health care (obstetrics and gynecology, general surgery, orthopedics, and otolaryngology) for Naval Hospital, Corpus Christi health care beneficiaries in 1990 when Homeport is in operation.

Objectives. The objectives of this study were to:

1. Review the literature for forecasting techniques, catchment areas, hospital utilization, and, cost effectiveness and cost benefit analysis, to identify the various dimensions of the problem.
2. Determine the current population base of military health care beneficiaries in the Corpus Christi area (Fiscal Year 1985

[FY85] being the most recent complete year available).

3. Project the 1990 population base of military health care beneficiaries in the Corpus Christi area.

4. Document the numbers of certain specialty health care providers during FY85 and the projected numbers for FY90.

5. Evaluate alternative methods for providing the specialty health care and develop recommendations concerning the best methods for providing that care.

Criteria. Alternative methods for providing NHCC health care beneficiaries health care services in the 1990s will be evaluated based on multiple criteria including judgments concerning improvements in access to care for beneficiaries, the projected availability of the specialists, the capability to begin utilizing the alternative immediately and phasing in additional beneficiaries as they arrive, administrative simplicity, and, likely availability of resources to make the alternative viable. These criteria are largely subjective in nature and discussion of the alternatives will include reference to them. No formal weighted scoring will be undertaken.

Assumptions. Several assumptions were made in order to limit the number of variables which needed to be considered in the overall study. These assumptions are reasonable statements concerning the environment of the study setting.

First, for the purposes of this study it is assumed that an adequate number of civilian medical specialist health care

providers would be available within the civilian community to establish this as a viable alternative as a source for care. This assumption is based on the Commanding Officer of the Naval Hospital, Corpus Christi, having received numerous unsolicited letters from specialty physician groups offering their services and wanting to help provide quality health care to eligible beneficiaries.

Secondly, it is assumed that an adequate number of military medical specialists would not be available for assignment to Naval Hospital, Corpus Christi for the next several years. NHCC has experienced, since September 1986, the situation of being without a permanently assigned general surgeon. More importantly, Naval Medical Command in Washington, DC has not planned for the assignment of a surgeon to NHCC at any time in the foreseeable future. This decision is based on prioritization of medical billets. Recent decisions have established the operational or seagoing billets as first priority, followed by overseas assignments, stateside large teaching hospitals, hospitals in areas without easy access to civilian or other military referral centers, and hospitals with easy referral to the civilian community. Naval Hospital, Corpus Christi falls under the latter and is expected to remain at low priority for the assignment of military specialists.

The next assumption is that specialty care sought through the community will be funded through CHAMPUS or on a direct payment

basis.

Another assumption is that NHCC will be staffed with enough primary care providers to keep the assigned specialists busy. NHCC currently has about a dozen primary care providers ranging from family practice physicians to general medical officers to physician's assistants and a nurse practitioner. Additionally, there is a plentiful supply of primary care providers including family practice physicians in the civilian community. If the primary care providers at NHCC are unable to handle the patient load, the dependents and retirees can be seen by other providers in the community under CHAMPUS and then referred back to the Naval Hospital for specialty care.

Another option which may come to fruition for the provision of primary health care is the Navy's NavCare Clinic System. NavCare is a civilian-contracted primary care clinic which, in its first implementation in some areas of the United States, has proven to be very popular with the dependents and retirees who were served. NavCare refers patients back to the military treatment facility for needed specialty care. Presently, there is not a NavCare Clinic in the Corpus Christi area and information was not available to indicate such a clinic would be established within the timeframe considered by this study.

One final assumption is that there will be no difference in the quality of care provided regardless of the setting or type of provider (active duty military, CHAMPUS, JHBDF, or contract).

Limitations. This study is limited to the specialty services of obstetrics and gynecology, general surgery, orthopedics, and otolaryngology.

Review of the Literature. Consideration of alternative methods of providing care is tied to forecasting how much and what kinds of care will be needed. For beneficiaries of the Military Health Care System (MHCS) this is a function of what care is available and how it is paid for. Money to pay for health care in the direct care system and the governments' cost for CHAMPUS is controlled through the United States Congress' budgetary process for the Department of Defense. This budgetary method mandates planning one to five years in advance, which limits major short-term adjustments in purchases. Of course, some care is purchased outside this system directly from providers based on out-of-pocket purchase decisions or through private third-party insurance. Information is not available on the magnitude of this method of beneficiaries seeking care.

The literature search was directed to the term "catchment area." A catchment area for purposes of this study, was defined as an identifiable geographic area surrounding a Uniformed Service Medical Facility (MHSS Catchment Area Directory, 20 Oct 1982). More generic discussion of catchment areas was found in an article by Regier et al (Oct, 1984) and an article by Eaton et al (Oct, 1984) which dealt with the National Institute of Mental Health Epidemiologic Catchment Area Program. Because of this

study's focus on workload projected for the Naval Hospital, Corpus Christi, the first emphasis was accepted.

Other articles and topics considered included regional differences in hospital utilization (Knickman and Foltz, Nov 1984), a computer-aided system for planning acute-care bed need in Michigan (Martin et al, Fall, 1985), and another planning article which focused on using synthetic and regression estimation for local health planning (MacKenzie et al, Jan 1985). Because of differences in financing care and barriers to access these articles were not directly applicable to planning for providing health care specialty services for the beneficiaries of a new Homeport site.

Warner and Luce (1982) present an indepth discussion on principals, practice, and potential as they apply to cost-benefit and cost-effectiveness analysis in health care.

"Cost-effectiveness relates to value for money. That is, a medical practice is considered to be cost-effective if it is 'worth' the expenditure of the resources required to perform it" (p. 43). Cost-effectiveness is largely a subjective undertaking.

Cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA) are not formulas for making decisions, rather, they help structure and analyze information in a manner that will inform and thereby assist policymakers. Viewed as information generating techniques, as aids to decision making, CBAs and CEAs

can serve admirably as one of several inputs into the policy-making process (Warner and Luce, 1982, p. 47).

The principal difference between CBA and CEA is that CBA is more objective, therefore easier to quantify in monetary terms. CEA has more subjective, nonmonetary measures associated with it. Examples are years of life saved and days of morbidity or disability avoided. Despite definitions, the distinctions in actual studies between CBA and CEA are not always clear cut. Warner and Luce (1982) cite a study labeled CBA by its author which is actually a CEA (p. 48). More and more, CBA and CEA are considered together rather than as two distinct methods of analysis.

In these analyses, costs are associated with identification of actual costs or resources used to produce the desired results. When possible these are measured in dollars, although other terms, usually of hours or days, and valuations may be used. Benefits and effectiveness terms include the identification of personal health benefits, health care resource benefits, other economic benefits such as an increase in work productivity, and other social benefits such as increased access to care for the elderly with Medicare and Medicaid Programs. Additional terms associated with benefits and effectiveness include: intermediate outcomes such as quicker and more accurate diagnosis regardless of prognosis, human capital values as in work loss that would occur without the health program,



willingness to pay (measuring the value that individuals place on reducing risks of death and illness), other approaches such as using court awards in civil cases as estimates of the value of life, and finally, health status indexes (Warner and Luce, 1982).

Warner and Luce (1982) emphasize that decision-making is only one--and perhaps not an important--role of CBA-CEA in a spectrum of potential uses and impacts. Negative interpretations of CBA-CEA range from seeing it as a "pernicious or sinister force, an assault on equity and the democratic ethos" (p.174). A less negative view, nonetheless, sees CBA-CEA as confusing and misleading due to the possible diversion of physical resources to reinforce the potentially false precision and increasing popularity of a concept. On the positive side are the consciousness-raising and decision-assisting factors of CBA-CEA.

In addition to examination of these topics of catchment area, hospital utilization, planning for acute-care bed need, and the use of synthetic and regression estimation as methods which might be useful approaches to the problem being studied, forecasting techniques were also extensively reviewed.

MacStravic's book, Forecasting Use of Health Services - A Provider's Guide, (1984), forms the basis for the following discussion. Any forecasting discussion must balance the need for informed analytic thinking with the reality that the future cannot be precisely known. The future is subject only to earnest

and careful conjecture, to informed speculation, not to the sort of quantitative calculation that the past permits. On the other hand, all planning decisions and many management decisions are based on estimates of the future. MacStravic claims that a better decision will result if forecasters can promise even the direction in which utilization will change. In his professional practice, MacStravic has generally managed to come within five percent of the future in immediate forecasts (up to one year), within 10 percent in intermediate forecasts (up to five years), and within 20 percent in longer-term forecasts.

MacStravic (1984) summarizes that the first essential step in forecasting health services utilization is to identify explicitly and precisely what is to be forecast (p. 10). Terms to consider in this area are projection techniques, prediction techniques, and prospection techniques. Other considerations are utilization fluctuations either within the year or from year to year.

Projection forecasting technique relies on identifying a pattern in past utilization of health services. All projection forecasting techniques are naive in that they use only information on past utilization to project future utilization. Examples of projection techniques are linear extrapolation, autocorrelation, analytic methods, and the product life cycle.

Where projection techniques treat future utilization as a function of past averages, trends, or other patterns, prediction techniques treat future utilization as a function of the present

or future status of some other factors (MacStravic, 1984, p. 97). Generally, prediction techniques are considered to be more reliable and more complex than projections. Predictions can be flawed by relying too heavily on quantitative techniques and ignoring human judgment. Prediction can take several forms--causal context (includes people and provider factors and environmental realities), population-based prediction (age-specific use rates), environment and system prediction (such as employment levels, supply of providers, physical capacity of the system, or the relative access to care offered by the system), and multifactor prediction (econometric prediction, multiple linear regressions and systems dynamics). Additionally, prediction calls for accurate identification of the relationship between the independent variables and health services utilization. In spite of a dependence on accurate identification of independent variables, forecasts based on predictive relationships usually turn out better than those based solely on observed patterns in past utilization (MacStravic, 1984, p. 99).

In contrast to projection and prediction techniques, which are imbedded in the past, prospection techniques look only forward. They "foresee" the future rather than calculate it as a function of past realities. Prospection can also involve combining different techniques or even different forecasts to produce a judgment-based estimate of future utilization. Ideally, combining approaches should exploit the strengths and

overcome the limitations of individual techniques (MacStravic, 1984, p. 153).

MacStravic (1984) continues discussing prospection, saying it includes the possibility of using projection and prediction techniques and results rather than representing an entirely separate approach to forecasting. Naive prospection requires no explicit understanding of the dynamics affecting health services use. The most common example of naive prospection is the familiar Delphi technique. Another prospection technique is a systematic thinking process used to foresee health service use based on explicitly identified causal factors. Change factors enable forecasters to estimate utilization based on identified developments expected to occur without relying on patterns of past developments. By careful selection of factors, informed estimates of their change, and educated guesses about the impact of such changes, forecasters can develop reasonable and explainable forecasts of use of specific health services (pp. 153-5).

Continuing with the review of literature, the focus of this effort was directed to finding any comparable studies. A study is in progress by the United States Air Force to develop a methodology for determining military health care needs based on the population around the military treatment facility, taking into account the uniquenesses of some military requirements. Based on information from Major Stephenson (Telephone Interviews,

22 May and 25 November 1986 and 20 January 1987), that study is currently directed only at ambulatory patient care and is not at a sufficiently advanced stage to permit its application to this graduate research project.

In another military setting, the United States Army had to decide how to provide health care for an entire battalion which was scheduled to relocate on a permanent basis to northern New York at Fort Drum. There were no pre-existing military medical facilities in the vicinity. The solution was to utilize civilian hospitals and allow the military physicians to be credentialled to treat military patients (Interview with H. K. Reamey III, 7 May 1986). This apparently workable solution isn't appropriate to NHCC and Homeport on 1990 since the Naval Hospital already exists. Alternatives involving mixed utilization of NHCC and resources in the civilian community will be considered.

One of the most informed persons on the Homeport Project is Rear Admiral James H. Scott, United States Navy, Retired. He is the primary spokesman for the South Texas Homeport Project. Admiral Scott is not aware of any ongoing or proposed studies to address the health care needs of beneficiaries in 1990. He is aware that there are plans for a medical/dental clinic to be built at Ingleside (Interview, 1986, Aug 22).

## CHAPTER II

### DISCUSSION

Navy Recovery Program. The Naval Recovery Program of 1980 has a goal of 600 ships by the end of the 1980s. The idea of spreading out homeports has been put forth since 1982 with plans to add homeports on both the United States Atlantic and Pacific coasts and on the Gulf of Mexico. The Gulf Coast Strategic Homeporting Action includes assigning ships in eight cities along the Gulf of Mexico in the states of Florida, Alabama, Mississippi, Louisiana, and Texas.

Literature Review Implications. Based on the literature review, the most promising approach to identifying alternatives for providing certain specialty health care (obstetrics and gynecology, general surgery, orthopedics, and otolaryngology) for Naval Hospital, Corpus Christi health care beneficiaries in 1990 when Homeport is in operation is in adapting the forecasting technique of prospection.

Forecasting is an analytic thinking process along with careful conjecture and informed speculation. Projection, prediction, and prospection are forecasting terms which were considered. Projection by itself was ruled out by definition since there are no prior trends, averages, or patterns associated with the Corpus Christi Homeport. Also, prediction was ruled out as a singular method of forecasting for this study since predictions can be flawed by relying too heavily on quantitative

techniques and ignoring human judgment. Also it calls for accurate identification of the relationship between the independent variables and health services utilization.

Prospection "foresees" the future rather than calculates it as a function of the past. It produces a judgment-based estimate of future utilization (MacStravic, 1984, p. 153). Prospection technique can be a systematic thinking process to foresee health service use based on explicitly identified causal factors. It may also include the possibility of projection and prediction techniques and results.

Cost-benefit analysis and cost-effectiveness analysis techniques are aids to decisionmaking when considered together. The former helps structure and analyze information while the latter, being subjective in nature, allows consideration of nonmonetary aspects. CBA and CEA influence the forecasting technique of prospection.

FY85 Population and Specialty Providers. As shown in Appendix A, the Corpus Christi catchment area population for FY85 was 23,964 (MHSS Catchment Area Directory, 1982, Oct 20). There was one orthopedic surgeon, one otolaryngologist, one general surgeon, and there was no obstetrician/gynecologist. The numbers of inpatient admissions and outpatient visits are available for each of the specialties (with none for OB/GYN), however they are misleading. When the solo practitioner is already saturated, more workload cannot be added. Each of the specialists was

seeing primarily active duty patients with others seen on a space available basis. Orthopedics saw dependents and retirees on an emergency basis only and was forced to disengage most of their care to the civilian community, in many cases due either to the complexity of the case or the inability to take on additional workload. The general surgeon and the otolaryngologist were able to see more patients in the other-than-active duty categories than the orthopedic surgeon.

In FY86 the total catchment area population was 24,566. The number and mix of specialty providers remained the same. When one of them was away on temporary additional duty or leave for short periods there frequently was not a relief surgeon ordered in to cover. Naval Hospital, Corpus Christi had to rely on either a Reservist or, more likely, had to rely on the community to provide emergency care. The Office of Medical Affairs picked up the bills for active duty personnel and CHAMPUS was used by other beneficiaries.

Due to each of the three specialists being solo practitioners, there were several complicated cases and elective procedures that they had to refer out. Again, the options for referral were either to specialists in the community or to a military hospital in San Antonio which was 160 miles away. Not having an extra pair of skilled hands to assist in surgery and always being on call, the surgeon had to limit his or her scope of practice.



FY90 Projected Population and Specialty Providers. The projected catchment area population for 1990 when homeport will be operational will total 36,033 (Appendix B). There will be an increase of approximately 4665 active duty personnel along with an estimated 7404 other beneficiaries. The projected growth in the Military Health Services System (MHSS) inpatient catchment area will be about 50.4 per cent above the FY85 levels when the homeport people are added in. It is possible that the actual numbers will be less than 50.4 per cent since the Aircraft Intermediate Maintenance Departments at Kingsville and Corpus Christi Naval Air Stations are being contracted and the affected active duty personnel and their families are being relocated.

The specialty provider picture in 1990 is projected to be entirely by contract. The obstetrical services will continue to be provided within in the civilian community. There is a chance that gynecological services will be provided within the Naval Hospital by contract. It is unlikely that the orthopedic surgeon and the otolaryngology surgeon will be replaced by active duty physicians in 1990. These services will also be contracted to specialists to provide the care within the Naval Hospital for the active duty personnel first and others as appointments are available.

Alternative Methods of Providing Care. Military medical treatment facilities (MTFs) have traditionally been staffed with a mixture of active duty and civilian (Civil Service) personnel.

The largest Navy hospitals have arrangements with nearby medical universities to enhance their teaching programs on either an exchange or consultant basis or both. The vast majority of providers at most MTFs are serving on active duty. The assignment of staff at Navy treatment facilities is based on a priority system with operational or seagoing billets being filled first, then overseas assignments, stateside large teaching hospitals, hospitals in areas without easy access to civilian or other military referral centers, and lastly, hospitals with easy referral to the civilian community. Naval Hospital, Corpus Christi falls under the latter. The physician specialists and others who are in short supply and high demand are most directly affected by the prioritization.

Implications of the Navy's prioritization process for assigning specialty health care providers and appropriate support staff in FY90 are that few, if any, additional specialists will be assigned to NHCC. The Navy is obligated and committed to staff billets as outlined above.

Medical needs generated by the increase in active duty strength will be met by a combination of the assigned medical personnel, the staff at the pierside medical clinic, and referral to specialists at NHCC. Due to already limited specialty care at NHCC, more dependents and retirees will be denied care at NHCC unless greater use is made of alternative methods of care which increase the utilization of the Naval Hospital.

Medical care needed by patients in FY85 but not available at NHCC was obtained through a variety of methods. Active duty personnel were either referred to another military MTF (San Antonio had the closest facilities--160 miles away, or the aeromedical evacuation system could be activated), or the person was referred to the civilian medical community for the necessary care and the Navy paid for it.

Dependents of both active duty and retirees, and the retirees themselves may opt to use CHAMPUS when the care is not available at the Navy Hospital. For Outpatient Care, a yearly deductible of 50 dollars for an individual or 100 dollars for a family is required. The CHAMPUS claims processor keeps track of the deductible paid. After the deductible is met, active duty families pay 20 per cent and all others pay 25 per cent of the CHAMPUS "allowable charge." The allowable charge is the price CHAMPUS sets for a specific medical service. If a provider does not "accept CHAMPUS assignment" and charges more than the allowable, the patient also pays the difference. For Inpatient Care, when there is an overnight stay in the hospital, there is no deductible. Active duty families pay 25 dollars or a daily fee, whichever is greater. All others pay 25 per cent of the allowable charges for both the hospital and the doctor's services. If a provider does not accept CHAMPUS assignment and charges more than the allowable, the patient is responsible for paying the difference. (MILITARY CARE CHAMPUS: Your Health

Benefits In A Nutshell, (1983), DoD CHAMPUS form FS-11).

The Joint Health Benefits Delivery Program (JHBDP) was developed for the purpose of reducing CHAMPUS costs and to ensure the maximum use of existing resources. Secretary of the Navy (SECNAV) Instruction 6320.20 (4 May 1984) implemented the JHBDP. This program allows MTFs which have facility capability but an inadequate number of providers to permit civilian health care providers to treat beneficiaries in an inpatient status at a military MTF. CHAMPUS and the beneficiary share the cost of such care. On an emergency basis the JHBDP provider can see active duty personnel and is reimbursed by the Navy for this service at the prevailing or otherwise agreed upon rate. JHBDP claims do not require the Nonavailability Statement from the local Health Benefits Advisor. Some benefits of the JHBDP include the following:

- o MTFs may make cost-effective utilization of staff and equipment during specialty shortages.
- o Good will improvement between Uniformed Services and the local medical community.
- o CHAMPUS cost reduction in institutional reimbursement.
- o Retirees have less out-of-pocket expense for inpatient services.
- o All beneficiaries are assured of a participating provider.
- o Less out-of-pocket expenses for both inpatient and outpatient services regardless of the location where the services are rendered. This means that a JHBDP provider must participate even if the service is rendered at his/her private office (Enclosure (1) of Commander, Naval Medical Command (COMNAVMEDCOM) ltr 6320 Ser 311/0123 dtd 26 Feb 85: Joint Health Benefits Delivery Program (JHBDP)).

Another way of providing medical care is to directly contract

for provider services. As implied, a provider's services are contracted for with the contract specifying everything that is expected ranging from specific procedures, hours of work, provisions for being on call, quality assurance standards to be met, and participation on the hospital medical staff. A contract provider can treat all eligible beneficiaries whereas the JHBDF providers are restricted to CHAMPUS and Medicare eligible beneficiaries. Contracting for services usually reflects the local prevailing civilian rate and is therefore expensive but allows continued use of the present facilities and staff. Contracting may also be utilized to supplement portions of a department such as physical therapy or certain laboratory functions, or nursing coverage where there are not enough active duty and civil service nurses.

As more services are added, the specialists' participation in hospital committees such as quality assurance, surgical services, medical staff, and credentials becomes critical. These professional responsibilities must be taken seriously to maintain or improve the quality of care delivered and to keep communication channels open.

One area of potential friction between the multiple types of providers stems from the various pay scales. The active duty physician may see more financial incentive to become a JHBDF or contract provider than to remain in the Navy and be subject to operational commitments and permanent change of station orders.

Other methods, which are alternatives to the current CHAMPUS program, which are less expensive, effective and efficient methods of providing health care for military beneficiaries are being proposed and studied at the direction of Congress. These studies are being accomplished by the Department of Defense (Health Affairs) as well as the respective Uniformed Services. Cost containment while maintaining quality care and maximizing use of existing facilities are goals being sought.

One such alternative is the NavCare Medical Clinic. NavCare Medical Clinics are civilian-run, primary care clinics for military dependents and retirees. Patients requiring specialty care are referred back to the MTF for care and treatment. The NavCare clinics are in a trial phase. To date they have been very popular and well received by the patients they have served. They have the advantage of increasing access to care and the cost to the government, per visit, is less than its costs through CHAMPUS.

Some Senate committee members expressed fear that setting up more NavCare clinics may duplicate the Department of Defense's (DoD's) experiment with a program, called CHAMPUS Prime, which offers primary medical treatment and preventive care to dependents and retirees for a nominal fee (Kimble, 1987, May 10, "Bill Would Curb ...", pp. 3, 14).

The CHAMPUS Reform Initiative (CRI) is a broad effort to systematically improve CHAMPUS and gain economies in the

program. CHAMPUS Prime is a main ingredient. Both refer to efforts to revise and update the current Civilian Health and Medical Program of the Uniformed Services which was established in 1965. CHAMPUS still operates under a fee-for-service reimbursement method, essentially paying just medical bills. Unlike many other government and private employer health programs, CHAMPUS has not adopted innovative methods to negotiate reduced costs, assist beneficiaries in selecting cost-effective, quality providers, or avoid unnecessary medical care, expensive for both beneficiaries and the government. Substantial CHAMPUS coinsurance requirements place much civilian medical care beyond the financial means of many military families, particularly retirees and those in the enlisted ranks.

The CRI arose from a need to resolve several serious problems with the current CHAMPUS program (Little, 1986, p. ES-1):

1. Poor coordination. Although CHAMPUS accounts for a substantial proportion of total care there is inadequate coordination between the military and civilian components of the Military Health Services System.
2. Inadequate access. With substantial beneficiary cost-sharing requirements, CHAMPUS does not offer an affordable alternative to the long delays in obtaining appointments in military facilities, particularly for outpatient primary care.
3. Excessive costs. With its outdated payment methods, CHAMPUS costs have been rising faster than health care costs generally, making civilian care too expensive for many military families and wasting DoD health care dollars.
4. Little quality monitoring. With its present fragmented structure, CHAMPUS has been limited in its ability to monitor the quality of care provided to beneficiaries in the civilian sector.
5. Complex procedures. When using CHAMPUS, beneficiaries and providers are frustrated by complex

procedures and long delays in receiving payment of claims.

The CRI is designed to achieve improved coordination between the military and civilian components of the Military Health Services System, better beneficiary access to primary care and other services, contained costs for both beneficiaries and the government, assured quality of care and simplified procedures (Little, 1986, p. ES-14).

The CHAMPUS Prime experiment, essentially a managed health care plan with the beneficiary paying a monthly participation fee, has come under considerable attention from various official groups such as, DoD(HA), Office of CHAMPUS, Congressional Budget Office, House Armed Services Committee, and the individual Uniformed Services. "During a recent forum on CHAMPUS, ... representatives from the Pentagon, congressional offices, industry and military families agreed CHAMPUS needs reform but disagreed on how to do it" (Kimble, 1987, May 10, "CHAMPUS Reform ...", p. 10).

Some members of Congress and DoD(HA) would like to get more specialty health care and surgery back into the military hospitals. CHAMPUS reform also aims to increase utilization of the military facilities through supplementation of personnel. Controversy exists over the trial phase of CHAMPUS Prime. DoD(HA) would like to move ahead with it, while the House Armed Services Committee thinks DoD(HA) is moving too quickly. Another



controversy is over whether there should be four or five contracts awarded for the demonstration phase. The Congressional Budget Office fears that even though a few hundred million dollars may be saved with the reforms, the entire revised program may lure numerous currently inactive health care beneficiaries back into the system and end up costing twice as much as before and (the Military health care system would) still be saturated (Kimble, 1987, May 11, "House Panel ...", p. 6). It will be a few years before the CRI is developed enough to evaluate.

A prospective look toward 1990 with an approximate increase of 50.4 per cent in the number of health care beneficiaries shows extensive use of contracted health care providers. This increase in beneficiaries will occur in a gradual, incremental fashion with the largest increases occurring in 1989 and 1990. The new medical clinic at pierside will triage and refer active duty patients to the appropriate specialists at NHCC.

Proportionately, unless the number of providers increases, access to specialty health care will remain extremely limited. With the use of additional specialists and a corresponding increase in support personnel, it is feasible to significantly increase the numbers of beneficiaries treated at NHCC. The present facility has space which can easily accomodate more practitioners.

### CHAPTER III

#### CONCLUSION AND RECOMMENDATIONS

Dependence solely on the active duty and civil service medical team has become a luxury of the past for the small naval hospital in a community with ample medical resources. Operational readiness and prioritization methods for assigning health care providers to billets have prevented NHCC from having obstetrics and gynecology since 1978. There has not been an active duty general surgeon at NHCC since September 1986 and one is not expected to be assigned. Orthopedics and otolaryngology billets look like they will be filled for another eighteen months to two years. It is too early to know what will happen when the current specialists either move to another duty station or get out of the Navy.

Military retirees and dependents generally prefer to obtain their health care at an MTF. There is an intrinsic value to being taken care of by people who have an understanding and appreciation for the military. A sense of the military health care system being part of the family adds to the comfort of being treated in the MTF. Also, inspite of considerable adverse publicity in recent years, health care providers know that the Navy is a leader in assuring quality care is delivered. The Navy must continue developing ways to increase the utilization of its medical facilities.

Using JHBDP providers works well for the retirees and

dependents but is not currently structured with the authority to provide care of the active duty population. A contract can be added to the JHBDF contract to provide care to active duty personnel. In these situations the provider must bill the government at the agreed upon rate instead of billing CHAMPUS.

The best method of providing quality care to the most beneficiaries from currently viable alternatives is to locally administer contracts. Health care provided on a contract basis will provide care for all categories of beneficiaries. Priority requirements already exist for contracts for general surgery and gynecology. Obstetrical care should remain being provided in the community. It is unlikely that the outcome of the 1983 study of reestablishing OB/GYN at NHCC has changed other than becoming more expensive to have "in-house." Contracts for orthopedics and otolaryngology will need to be studied. These practices are now restricted to mostly active duty personnel with only a few in other beneficiary categories being seen and treated.

When homeport becomes operational and there is approximately a 50.4 per cent increase in beneficiaries over the FY85 levels, health care will again be restricted to primarily active duty personnel and emergencies unless there are contracts in place to provide the specialty care and support staff needed. The NHCC administration and all levels of the chain of command must ensure the continuing availability of health care to its beneficiaries. Judicious use of contracting may well be the key to survival of

Naval Hospital, Corpus Christi through this period of metamorphosis of military healthcare.

An interesting study for the future would be to compare unit costs of specific diagnosis related groups (DRGs) between the Naval Hospital and the civilian medical community. Cases that are treated at Naval Hospital, Corpus Christi would be the types used for comparison since multiple or serious trauma and the more seriously complicated cases are not handled at NHCC. Costs of labor would have to have common denominators.

APPENDIX A

NRMC Corpus Christi Catchment Area Population

Estimates for FY82 - FY88

(MHSS Catchment Area Directory, 1982, Oct 20)

FY82	FY83	FY84	FY85	FY86	FY87	FY88
22,081	22,593	23,239	23,964	24,566	25,075	25,523

% Chg	% Chg	% Chg	% Chg	% Chg	% Chg
1.023	1.029	1.031	1.025	1.021	1.018

Estimated Increases to the Catchment Area Population Base  
for FY89 - FY90

(All beneficiary classes except Homeport)

(Using average % change factor from FY82 - FY88 [1.024])

FY89	FY90
26,135	26,762

APPENDIX B

Homeport Addition in FY90

(Draft Environmental Impact Statement United States Navy Gulf  
Coast Strategic Homeporting, August 1986)

Active Duty	4665
Spouses	1718
Dependent Children	2888
<u>TOTAL</u>	<u>9271</u>

Homeport Addition + (FY90) 26,762 = 36,033

((FY90 - FY85) + Homeport Addition) / FY85 Base = 50.4% increase

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